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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,570	02/25/2002	Rainer Moerig	594-25573-US	3171

7590 01/27/2004  
WesternGeco, L.L.C.  
P.O. Box 2469  
Houston, TX 77252

EXAMINER

TAYLOR, VICTOR J

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/082,570

Applicant(s)

MOERIG ET AL.

Examiner

Victor J. Taylor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Office Action*.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because of minor informalities in figures 3 and 4. These two drawings are too dark and not in compliance with the rejections on USPTO form 948 attached to paper 6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the amended method step for determining a difference for data is required to be shown in a new block or flow chart or similar diagram and is required to show the method steps of first data segment with the first data window and the second data segment with the second data window with the steps to determine the difference in data segments. The steps and claimed elements of Figure 2 do not show the claimed limitations as amended and must be clearly shown or the feature(s) canceled from the claim(s).

Appropriate corrections to the specification are required.

No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

3. Claim 1 is objected to because of the following informalities:

Claim 1 has been amended to change the comparing method step to a method step for determining a difference in data in a window. The limitations recite a first data segment and a second data segment with the steps of using a plurality of sweeps as indicated in the acquired "cascaded" sweep data 201 step in the flow chart directed in figure 2 and further indicate the first data segment in a window and a second data segment in a corresponding window with steps of selecting first data and second data and using corresponding windows.

It is not clear in the claim structure just which corresponding window is the first data segment window or which corresponding window is the second data segment window or how the claimed limitation method steps relate to the flow chart steps of comparing short windows of target data segment of element 209 in figure 2. Clear antecedent claim structure with clear drawing support is required.

Figure 2 shows the comparing short windows element 209 and does not show the amended method step feature for "determining a difference", appropriate corrections to the drawing and claim structure is required. Appropriate correction is required.

***Response to Arguments***

4. Applicant's arguments see paper 7 filed 28 July 2003 have been fully considered but they are not persuasive. The applicant amends the comparing method step to the steps of determining a difference in claim 1 with the changing data in a first window and

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using the data in a corresponding second window based on the said difference in the first data segment and the second data segment with the arguments presented in the response to effect the noise removal and processing seismic stacking of seismic data.

The arguments found in the response and as stated by the applicant in paper 7 in lines 6-14 on page 7 for "determining a difference for data" that is not prior art cross-correlation as found in Fleur and differs with the prior art of Fleur that is cross-correlation and is a third time series whereas the step of "determining a difference for data" in the present disclosure can result in data measures that may be compared to threshold values prior to the amended claim 1 of "changing said data in a window by using said data in a corresponding window based on said difference" is not clear in just what may, or may not or can result in a desired result, and comprise this difference.

The applicant further agrees in paper 7 of record in lines 12-14 on page 7 of 9 that "The changing said data" can result in a third time series but the changed data are not the output of the cross-correlation as used in Fleure.

The applicant further argues none of the prior art teaches steps for the amended "determining a difference" for data in a window comprising a portion of the first data segment with data in a corresponding window comprising a second data segment using a corresponding window based on the difference presented in the response of record in lines 15-21 on page 8 of 9 in paper 7.

Fleur as disclosed in the previous office action in paper 6 of record discloses the cross correlation and the changing of data. This term for determining a difference in the

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amended claims in the broad sense of the term could comprise the cross-correlation or changing the data as found in Fleur and discussed in the previous office action.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 has been amended to change the comparing method step to a method step for determining a difference in data in a window. The limitations recite a first data segment and a second data segment with the steps of using a plurality of sweeps as indicated in the acquired "cascaded" sweep data 201 step in the flow chart directed in figure 2 and further indicate the first data segment in a window and a second data segment in a corresponding window with steps of selecting first data and second data and using corresponding windows. It is not clear just which window comprises the first data window or the second data window or which window comprises the difference data window. The drawing in figure 2 fails to support the amended determining a difference in data in a clear data flow chart. Correction is required.

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**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor J. Taylor whose telephone number is 703-305-4470. The examiner can normally be reached on 8:00 to 5:30 PM.

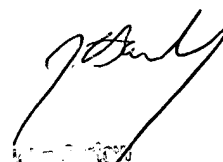
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-4509 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist telephone number is 703-306-3431.

7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, telephone number is 703-306-3431.

  
Examiner V. Taylor  
Art Unit 2863  
20 January 2004  
VICTOR J. TAYLOR  
PATENT EXAMINER

JB

  
John E. Barlow  
Supervising Patent Examiner  
Technology Center 2800